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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/804,238 | 03/19/2004 | Jens Ole Brochner Andersen | 81421-4035 | 6603 |
| 28765 | 7590 | 07/26/2005 | | |
| WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006 | | | EXAMINER VANATTA, AMY B | |
| | | | ART UNIT 3765 | PAPER NUMBER |

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.

10/804,238

Applicant(s)

ANDERSEN, JENS OLE
BROCHNER

Examiner

Amy B. Vanatta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 11-25 and 27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☒ Claim(s) 1-10 is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/529,362.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|--|---|

DETAILED ACTION

Specification

1. The specification is objected to because it is not in compliance with 37 CFR 1.173(a)(1), which requires that the specification be provided in *double column format*.

Appropriate correction is required.

Claim Objections

2. Claims 1-10 are objected to because they have not been provided in double column format, as required by 37 CFR 1.173(a)(1).

Appropriate correction is required.

Election/Restriction

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10 and 26, drawn to an apparatus for producing a nonwoven fabric and related product-by-process claims, classified in class 28, subclass 104.
 - II. Claims 11-23 and 27, drawn to a three-layered sandwich fiber web, classified in class 442, subclass 408.
 - III. Claims 24-25, drawn to a process for making a fiber web and related product-by-process claim, classified in class 156, subclass 148.

The inventions are distinct, each from the other because of the following reasons:

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4. Inventions I and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus can be used for making a different product, such as a single layer nonwoven fabric, or a nonwoven fabric comprising layers which all comprise equally homogenous mixtures of synthetic and natural fibers. The product-by-process claims 6-10 are distinct from the product claims of Invention II since the product of Group II can be made by another and material different process, such as using a plant which does not have a bonding station upstream of the hydroentangling station.

5. Inventions III and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be practiced by a different apparatus, such as a plant in which the bonding station is downstream of the hydroentangling station.

6. Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a

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process in which the nonwoven is formed by hydroentangling the fibers, without any heat bonding steps.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Groups II and III is not required for Group I, restriction for examination purposes as indicated is proper.

8. Thus, as set forth above, the newly added claims 11-25 and 27 are directed to an invention that is independent or distinct from the invention originally claimed.

According to MPEP 1450, the original patent claims are held to be constructively elected. The added claims 11-25 and 27 are held to be constructively non-elected and are withdrawn from consideration. If the original patent claims are found allowable, and a divisional application has been filed for the non-elected claims, further action in this reissue application will be suspended, pending resolution of the divisional application. See MPEP 1450.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is confusing since it appears to be drawn to three statutory classes of invention: a product, a process, and an apparatus. It appears that the claim is intended to be a product-by-process claim, including the step of producing the nonwoven fabric in a plant comprising the claimed structure. In such a case, the manipulative steps which make up the claimed process used to produce the product of the product-by-process claim should be more clearly set forth.

Claim 7 is confusing when taken in light in the specification, since the specification in column 7 discloses use of bi-component fibers in which the core has a higher melting point than that of the sheath so that heating in the oven causes cross bonding of the synthetic fibers in the affected areas without risking melting of the core during bonding (see col. 7, lines 51-62). Thus, claim 7 is confusing in reciting that the sheath has a higher melting point than that of the core, since this would require that the oven temperature be sufficient to melt the sheath in order to result in bonding, which temperature would produce melting of the core. It appears that this would result in destruction of the bi-component fibers and it is unclear how such a structure can result in the claimed nonwoven fabric.

Claim Rejections - 35 USC § 102/103

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 6 and 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by Haid et al (US 5,240,764) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haid et al.

Claim 6 appears to be a product-by-process claim which claims a nonwoven fabric comprising synthetic fibers which is produced in a plant having the claimed components. Product-by-process claims are not limited to the manipulations of the recited steps, but only to the structure implied by the steps:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

As set forth in MPEP 2113:

"The Patent Office bears a lesser burden of proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Regarding claim 6, Haid discloses a nonwoven fabric comprising synthetic fibers (col. 3, lines 4-6). The nonwoven is bonded and hydroentangled (see, e.g., lines 3-12 of

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the Abstract). Haid discloses that the nonwoven comprises cellulose fibers in an amount of between 50% and 95% (col. 9, lines 27-29 and col. 10, lines 31-33), as in claim 8. Thus, the product of Haid appears to be identical to or only slightly different from the product claimed in claims 6 and 8.

Regarding claims 9-10, Haid discloses that the non-fusible fibers may comprise cellulose and are present in an amount of from 50-95 wt %. The cellulose fibers are not specifically disclosed as present in the amounts represented by the ranges of 60-90% or 75-85%, as in claims 9-10. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include cellulose fibers in the nonwoven of Haid in amounts within the smaller ranges of 60-90% or 75-85%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

14. Claims 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by Roussin-Moynier (US 5,375,306) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Roussin-Moynier.

As set forth above, claim 6 appears to be a product-by-process claim which claims a nonwoven fabric comprising synthetic fibers which is produced in a plant having the claimed components. Roussin-Moynier discloses a nonwoven fabric comprising synthetic fibers (see, e.g., line 3 of the Abstract). The nonwoven is bonded and hydroentangled (see, e.g., lines 5-8 of the Abstract). Roussin-Moynier discloses

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that the nonwoven comprises wood pulp fibers. Wood pulp inherently comprises cellulose fibers, as in claims 8-10. Roussin-Moynier discloses an example in which the wood pulp ("cellulose fibers") is present in an amount of 80% (see Table I, mixture A). This falls within the ranges claimed in claims 8-10. between 50% and 95% (col. 9, lines 27-29 and col. 10, lines 31-33), as in claim 8. Thus, the product of Roussin-Moynier appears to be identical to or only slightly different from the product claimed in claims 6 and 8-10.

Regarding claim 7, Roussin-Moynier discloses that various sheath-core type fibers may be used, and discloses the use of various plastics for the components (col. 5, lines 28-41). The use of a sheath-core comprising a sheath with a higher melting point is not disclosed, however, such as in claim 7. It is within the routine skill in the art, however, to choose the types of plastic materials for the sheath and core based upon availability, cost, and desired end uses. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a plastic having a higher melting point for the sheath of the sheath-core fibers used in the nonwoven of Roussin-Moynier, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

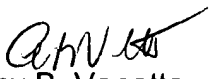
15. Claims 1-5 and 26 are allowable, however the patent claims should be provided in double column format in order to comply with 37 CFR 1.173(a)(1).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 571-272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Amy B. Vanatta
Primary Examiner
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